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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.	
10/523,569	01/27/2005	Osamu Chujo	02796/0202443-US0	5858	
7278 DARBY & DA	7590 05/16/200° RBY P.C.	1	EXAMINER		
P. O. BOX 5257			CHANG, VICTOR S		
NEW YORK, NY 10150-5257			ART UNIT	PAPER NUMBER	
•		·	1771		
		·	MAIL DATE	DELIVERY MODE	
			05/16/2007	PAPER	

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

		Application No.	Applicant(s)				
Office Action Summary		10/523,569	CHUJO ET AL.				
		Examiner	Art Unit				
		Victor S. Chang	1771				
Period fo	The MAILING DATE of this communication app or Reply	pears on the cover sheet with the	e correspondence address	<b>4-</b>			
WHI( - Exte after - If NC - Failu Any	ORTENED STATUTORY PERIOD FOR REPLY CHEVER IS LONGER, FROM THE MAILING DATE of time may be available under the provisions of 37 CFR 1.15 SIX (6) MONTHS from the mailing date of this communication. Of period for reply is specified above, the maximum statutory period varie to reply within the set or extended period for reply will, by statute reply received by the Office later than three months after the mailing ed patent term adjustment. See 37 CFR 1.704(b).	ATE OF THIS COMMUNICATI 36(a). In no event, however, may a reply be will apply and will expire SIX (6) MONTHS fr . cause the application to become ABANDO	ON.  timely filed  om the mailing date of this communic  NED (35 U.S.C. & 133)				
Status		•		•			
1)⊠	Responsive to communication(s) filed on 04 A	pril 2007.					
		action is non-final.		, t.			
3)□	·—						
	closed in accordance with the practice under E						
Disposit	ion of Claims						
4)⊠	4)⊠ Claim(s) <u>1,2 and 4-19</u> is/are pending in the application.						
	4a) Of the above claim(s) <u>6-19</u> is/are withdrawn from consideration.						
5)	Claim(s) is/are allowed.						
6)⊠	☑ Claim(s) <u>1,2,4 and 5</u> is/are rejected.						
7)	Claim(s) is/are objected to.						
8)[	Claim(s) are subject to restriction and/or	r election requirement.					
Applicat	ion Papers						
9)[	The specification is objected to by the Examine	r.					
10) The drawing(s) filed on is/are: a) accepted or b) objected to by the Examiner.							
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).							
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).							
11)	The oath or declaration is objected to by the Ex	aminer. Note the attached Office	ce Action or form PTO-152	2.			
Priority ι	under 35 U.S.C. § 119						
	Acknowledgment is made of a claim for foreign	priority under 35 U.S.C. § 119	(a)-(d) or (f).	•			
a)	☐ All b)☐ Some * c)☐ None of:	•					
	1. Certified copies of the priority documents						
	2. Certified copies of the priority documents						
	3. Copies of the certified copies of the prior		ved in this National Stage				
* 0	application from the International Bureau (PCT Rule 17.2(a)).						
* See the attached detailed Office action for a list of the certified copies not received.							
Attachmen	t(s)						
_	e of References Cited (PTO-892)	4) 🔲 Interview Summa	ry (PTO-413)				
2) 🔲 Notic	e of Draftsperson's Patent Drawing Review (PTO-948)	Paper No(s)/Mail	Date	-			
	mation Disclosure Statement(s) (PTO/SB/08) r No(s)/Mail Date	5)  Notice of Informa 6)  Other:	Patent Application				
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U.S. Patent and Trademark Office PTOL-326 (Rev. 08-06)

## DETAILED ACTION

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### Introduction

- 1. Applicants' replacement drawings, amendments and remarks filed on 4/4/07 have been entered. Claims 1, 2, 4 and 5 have been amended. Claim 3 has been cancelled. Claims 1, 2, 4 and 5 are active.
- 2. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.
- 3. The replacement drawings are accepted. In view of the cancellation of claim 3 and amendments, the 101 and 112 rejections are withdrawn. In response to the newly added foamed layer structural features (gap), the grounds of rejections have been rewritten as set forth below.

## Rejections Based on Prior Art

4. Claims 1, 2, 4 and 5 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over JP 2000-177039 [machine translation], and evidenced by applicants' admission.

JP '039 relates to a foamed laminated sheet. Fig. 2 shows that a polyethylene film 13 (a contiguous synthetic film) is laminated (adhered) to a surface of a paperboard 10 (base paper) with a joining inhibitor 11 applied in a spotted fashion. Figs. 4-6 shows that the laminated sheet is heated using a hot plate, so that the part which is not joined to the board 10 by the inhibitor 11 is foamed under a vacuum suction to obtain the foamed laminated sheet [paragraphs 0009, 0015-0016]. Foaming is performed by evaporation of the moisture contained in paper [paragraph

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0006]. As clarified by applicants at Remarks page 8 that the term "a foaming plane" is defined in specification page 9 as "a state where the foaming cell group 21 is formed in the surface state", so it is interpreted as "a surface layer of foamed cell group", and the foamed layer of JP '039 reads on the interpreted structure.

For claims 1, 2, 4 and 5, JP '039 is silent about having a gap in the foamed layer. However, since JP '039 teaches that by adjusting the magnitude of the spot of the junction inhibition agent, the magnitude and the location of the foaming cells can be adjusted [paragraph 0017], the unfoamed laminated (adhered) portion of JP '039 reads on the gap as claimed, as evidenced by applicants' admission that JP '039 necessarily forms gaps between the foamed portions [specification, page 2, bottom full paragraph]. Regarding the structural features and constraining means of the die in claims 1 and 5, since they are not structural features of the claimed article, and the constraining means related process limitations have not been shown on the record to produce a patentably distinct article, the formed articles are rendered prima facie obvious, and these process related limitations at the present time have not been given patentable weight.

# Response to Argument

Applicants argue at Remarks page 9 that in the present invention, the synthetic resin film 5. is contiguously applied to the base paper, in contrast, since JP '039 is applied to the base sheet in a spotted fashion, the foamed laminated sheet is interrupted at each point where the joining inhibitor is present. However, since JP '039 shows in Fig. 2 a contiguous PE film, it is unseen how JP does not apply a contiguous film to the base paper. Applicants also appear to have

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misunderstood JP '039 as having interruption at each point where joining inhibitor is present, whereas Figs. 4-6 clearly shows that the joining inhibitor spot is in fact applied as nucleating spot for facilitating the foaming of the film.

Applicants argue at page 9 that JP '039 teaches that the foaming step occurs only after vacuum suction, not during heat, therefore is not foamed with high magnification as the instant invention. However, since the degree (magnification) of foaming is not recited in any of elected claims, applicants' argument is unrelated to the claimed invention.

Applicants argue at page 10 that since JP '039 requires the presence of joining inhibitor, its foaming process cannot be modified to establish obviousness. However, since JP '039 anticipates the instant invention as claimed, and the constraining means related process limitations have not been shown on the record to produce a patentably distinct article, the formed articles are rendered *prima facie* obvious, and these process related limitations at the present time have not been given patentable weight.

### Conclusion

6. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period

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will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Victor S. Chang whose telephone number is 571-272-1474. The examiner can normally be reached on 8:30 - 5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Terrel H. Morris can be reached on 571-272-1478. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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Victor S Chang Examiner Art Unit 1771

5/8/2007

ELIZABETH M. COLE